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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,905	04/09/2004	Raimund Staat	GK-EIS-1077 / 500593.2006	2443
26418	7590	12/09/2008	EXAMINER	
REED SMITH, LLP ATTN: PATENT RECORDS DEPARTMENT 599 LEXINGTON AVENUE, 29TH FLOOR NEW YORK, NY 10022-7650			LE, HUYEN D	
			ART UNIT	PAPER NUMBER
			2614	
			MAIL DATE	DELIVERY MODE
			12/09/2008	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/821,905	<b>Applicant(s)</b> STAAT, RAIMUND	
	<b>Examiner</b> HUYEN D. LE	<b>Art Unit</b> 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 September 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 1 is objected to because of the following: on line 5, before “inlet”, “sound” should be inserted. Appropriate correction is required.

Claim 3 is objected to because of the following: on line 3, “diagram” should be changed to --diaphragm--. Appropriate correction is required.

Claim 4 is objected to because of the following: on line 2, before “damping”, “a” should be changed to --the--. Appropriate correction is required.

Claim 5 is objected to because of the following: on line 2, before “damping”, “a” should be changed to --the--. Appropriate correction is required.

Claim 6 is objected to because of the following: on line 2, before “damping”, “a” should be changed to --the--. Appropriate correction is required.

2. Claim 4 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 4 does not have a further limitation from claim 1.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-4 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Lazzeroni et al. (U.S. patent 5,329,593).

Regarding claim 1, Lazzeroni et al. teaches a microphone (figures 1, 2, 4) that comprises a diaphragm system with a first diaphragm (34) having a first surface and a second surface, a first sound inlet (20, 21, 26) in at least one first opening arranged substantially parallel to and facing the first surface of the first diaphragm (34), and a second sound inlet (24, 25) in at least one second opening arranged substantially perpendicular to the second surface of the diaphragm (34, figures 1, 2, 4, 7), wherein the sound entering via the second sound inlet (24, 25) strikes the second surface of the first diaphragm very largely unaffected as claimed (figure 4).

Lazzeroni further teaches an acoustic damping (23) that is arranged at the first sound inlet or between the first sound inlet and the first surface of the diaphragm (34) for damping the sound entering via the first sound inlet before the sound strikes the first surface of the first diaphragm.

As shown in the drawings, the first sound inlet (20, 21, 26) lies in front of the first diaphragm and the second sound inlet lies behind the first diaphragm with respect to the main sound direction as claimed.

Regarding claim 2, Lazzeroni teaches an opening (24, 25) of a housing (18) which is laterally provided forming the second sound inlet.

Regarding claim 3, as shown in figures 1, 2, 4, 5, the first sound inlet (20, 21, 26) is arranged in a housing (16) and lies with respect to the main sound direction in front of the first diaphragm (34).

Regarding claim 4, Lazzeroni teaches the damping element (23) is constructed in the diaphragm unit and in the second opening (see the damping element 21 in the opening in figures 1, 2, 4, 5).

Regarding claim 7, Lazzeroni teaches the microphone for use in a microphone headset. (figure 5).

Regarding claim 8, Lazzeroni shows the damping element (the open cell, soft, pliable plastic foam 23) which includes a passive diaphragm which is perforated.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lazzeroni et al. (U.S. patent 5,329,593).

Regarding claims 5-6, Lazzeroni teaches the first sound inlet (20, 21, 26) that is constructed with an acoustic damping element as claimed.

Lazzeroni does not specifically teach that the first sound inlet being constructed with an acoustic element and the volume between the damping element (23) and the diaphragm (34) forms an acoustic lowpass and the cut-off frequency as claimed. However, Baumhauer does not restrict the range for the frequency response of the microphone.

Therefore, it would have been obvious to one skilled in the art to construct the damping element in the first sound inlet and the volume between the damping element and the diaphragm for forming any frequency range such as an acoustic lowpass and the cut-off frequency of which corresponds with the travel time from the first sound inlet to the second sound inlet depending the desired frequency characteristics and better adjusting the directional characteristics in the system.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-8 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUYEN D. LE whose telephone number is (571) 272-7502. The examiner can normally be reached on 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CURTIS KUNTZ can be reached on (571) 272-7499. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HUYEN D. LE/  
Primary Examiner, Art Unit 2614

HL  
December 7, 2008